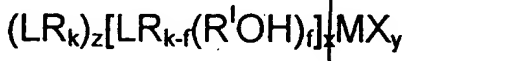
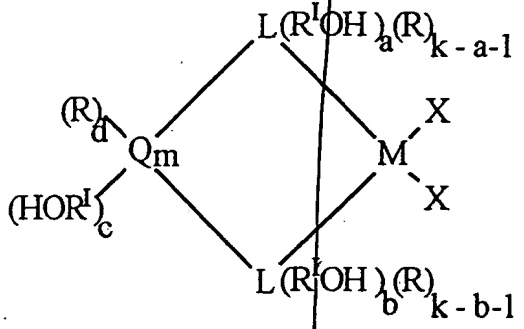
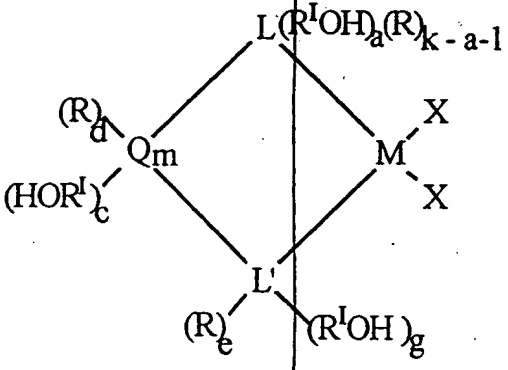
1. (amended twice) A heterogeneous catalytic component obtained by reacting a porous inorganic support with a metallocene compound, wherein the metallocene compound is defined by formula I, II, or III:



I,



II, or



III,

wherein:

the **L** groups are equal to or different from each other, wherein each **L** is selected from the group consisting of: cyclopentadienyl, indenyl, tetrahydroindenyl, fluorenyl, octahydrofluorenyl, and benzoindenyl;

each **R** is independently hydrogen, linear or branched C_1-C_{20} alkyl, linear or branched C_3-C_{20} cycloalkyl, linear or branched C_6-C_{20} aryl, linear or branched C_3-C_{20} alkenyl, linear or branched C_7-C_{20} arylalkyl, linear or branched C_7-C_{20} alkylaryl, linear or branched C_8-C_{20} arylalkenyl, or a group SiR^{II}_3, wherein the C_1-C_{20} alkyl, the C_3-C_{20} cycloalkyl, the C_6-C_{20} aryl, the C_3-C_{20} alkenyl, the C_7-C_{20} arylalkyl, the C_7-C_{20} alkylaryl, and the C_8-C_{20} arylalkenyl are optionally substituted with 1 to 10 halogen atoms;

the $\mathbf{R^I}$ groups are equal to or different from each other, wherein each $\mathbf{R^I}$ is a divalent aliphatic or aromatic hydrocarbon group containing from 1 to 20 carbon atoms, optionally containing from 1 to 5 heteroatoms of groups 14 to 16 of the Periodic Table of the Elements, and optionally containing boron;

each **Q** is independently B, C, Si, Ge, or Sn;

M is a lanthanide, an actinide, or a metal of group 3, 4, or 10 of the Periodic Table of the Elements;

each **X** is independently hydrogen, chlorine, bromine, OR^{II}, NR^{II}_2, C_1-C_{20} alkyl, or C_6-C_{20} aryl;

each $\mathbf{R^{II}}$ is independently linear or branched C_1-C_{20} alkyl, linear or branched C_3-C_{20} cycloalkyl, linear or branched C_6-C_{20} aryl, linear or branched C_3-C_{20} alkenyl, linear or branched C_7-C_{20}

arylalkyl, linear or branched C_7-C_{20} arylalkenyl, or linear or branched C_7-C_{20} alkylaryl;

L' is N or O;

when **L** is cyclopentadienyl, **k** is equal to 5; when **L** is indenyl, **k** is equal to 7; when **L** is fluorenyl or benzoindenyl, **k** is equal to 9; when **L** is tetrahydroindenyl, **k** is equal to 11; and when **L** is octahydrofluorenyl, **k** is equal to 17;

z is equal to 0, 1, or 2;

x is equal to 1, 2, or 3;

y is equal to 1, 2, or 3;

x + **y** + **z** is equal to a valence of **M**;

m is equal to 1, 2, 3 or 4;

a is an integer whose value ranges from 0 to **k**-1;

b is an integer whose value ranges from 0 to **k**-1;

f is an integer whose value ranges from 1 to **k**;

g is equal to 0 to 1;

c is equal to 0 or 1;

e is equal to 0 or 1;

a + **b** + **c** is at least 1;

a + **g** + **c** is at least 1;

d is equal to 0, 1, or 2;

when **Q** is B, then **c** + **d** = 1;

when **Q** is C, Si, Ge, or Sn, then **c** + **d** = 2;

when **L'** is N, then **g** + **e** = 1; and

when **L'** is O, then **g** = 0 and **e** = 0.

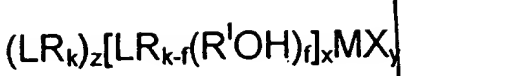
5. (amended three times) A heterogeneous catalytic component according to claim 1 wherein the inorganic support is previously treated with alumoxane or trialkylaluminum.

6. (amended twice) A heterogeneous catalytic component obtained by reacting an alumoxane or a trialkylaluminum with a metallocene

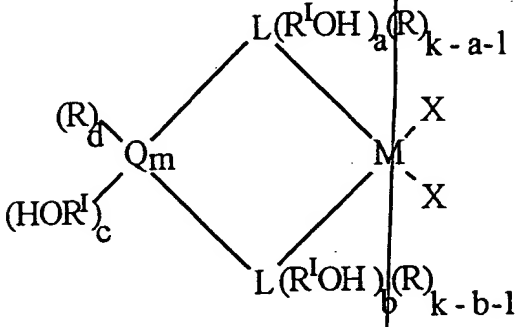
compound defined by formula I, II, or III:

sub C5

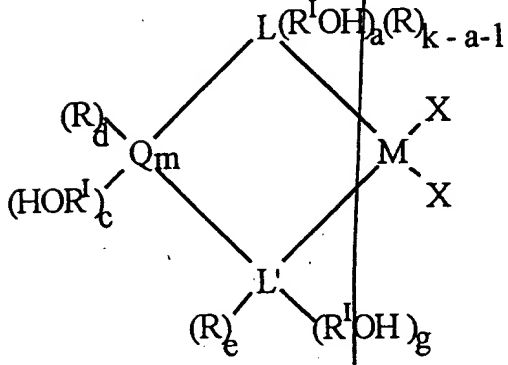
C2 Cont



I,



II, or



III,

wherein:

the **L** groups are equal to or different from each other, wherein each **L** is selected from the group consisting of: cyclopentadienyl, indenyl, tetrahydroindenyl, fluorenyl, octahydrofluorenyl, and benzoindenyl;

each **R** is independently hydrogen, linear or branched C_1-C_{20} alkyl, linear or branched C_3-C_{20} cycloalkyl, linear or branched C_6-C_{20} aryl, linear or branched C_3-C_{20} alkenyl, linear or branched C_7-C_{20} arylalkyl, linear or branched C_7-C_{20} alkylaryl, linear or branched C_8-C_{20} arylalkenyl, or a group SiR^{II}_3, wherein the C_1-C_{20} alkyl, the C_3-C_{20} cycloalkyl, the C_6-C_{20} aryl, the C_3-C_{20} alkenyl, the C_7-C_{20} arylalkyl, the C_7-C_{20} alkylaryl, and the C_8-C_{20} arylalkenyl are optionally substituted with 1 to 10 halogen atoms;

the $\mathbf{R^I}$ groups are equal to or different from each other, wherein each $\mathbf{R^I}$ is a divalent aliphatic or aromatic hydrocarbon group containing from 1 to 20 carbon atoms, optionally containing from 1 to 5 heteroatoms of groups 14 to 16 of the Periodic Table of the Elements, and optionally containing boron;

each **Q** is independently B, C, Si, Ge, or Sn;

M is a lanthanide, an actinide, or a metal of group 3, 4, or 10 of the Periodic Table of the Elements;

each **X** is independently hydrogen, chlorine, bromine, OR^{II}, NR^{II}_2, C_1-C_{20} alkyl, or C_6-C_{20} aryl;

each $\mathbf{R^{II}}$ is independently linear or branched C_1-C_{20} alkyl, linear or branched C_3-C_{20} cycloalkyl, linear or branched C_6-C_{20} aryl, linear or branched C_3-C_{20} alkenyl, linear or branched C_7-C_{20} arylalkyl, linear or branched C_7-C_{20} arylalkenyl, or linear or